Progress towards Malaria Elimination in Ghana

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Outline

• Current malaria control interventions in Ghana

• Progress with malaria control in Ghana

• Malaria elimination agenda

• Role of Case Management towards Malaria Elimination
Introduction

• Malaria is a **major public health and socioeconomic problem** in Ghana

• It is a leading cause of morbidity in Ghana, particularly among children under the age of five and pregnant women

• High burden: one of 10 sub-Saharan African countries that contribute to > 70% of global cases and deaths

• High disease expenditure under the National Health Insurance Scheme (NHIS)

• Malaria costs Ghana up to **6% of GDP** each year
  - **Costs from Lost Productivity**
    - Ghanaians lose about 1-9 workdays per episode of malaria
    - Even when present at work, productivity is reduced
    - Caregivers lose about 5 days of work taking care of a child with malaria
  - **Direct Costs**
    - Medicines, Transportation etc.
### Coverage of Major Malaria Control Interventions in Ghana: NSP 2021-2025

#### Strategic Interventions

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Coverage (Scope and Scale)/Districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITN distribution; Routine</td>
<td>260 (Nationwide)</td>
</tr>
<tr>
<td>ITN distribution; Mass Campaign</td>
<td>235/260 (Except IRS dist)</td>
</tr>
<tr>
<td>IRS</td>
<td>25 (All dist in Upper West, Obuasi, 3 districts in Upper East and 9 dist-Northern region)</td>
</tr>
<tr>
<td>Larva Source Management</td>
<td>105</td>
</tr>
<tr>
<td>IPTp</td>
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</tr>
<tr>
<td>SMC</td>
<td>55 (NR, UER &amp; UWR)</td>
</tr>
<tr>
<td>Malaria Vaccine</td>
<td>42 (Ahafo, BR, BER, CR, OR, UER, VR)</td>
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<td>Case Management</td>
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</tbody>
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#### Notes:
- **ITN distribution; Routine**: Nationwide
- **ITN distribution; Mass Campaign**: Except IRS dist
- **IRS**: All dist in Upper West, Obuasi, 3 districts in Upper East and 9 dist-Northern region
- **Larva Source Management**: 105
- **IPTp**: Nationwide
- **SMC**: NR, UER & UWR
- **Malaria Vaccine**: 42 (Ahafo, BR, BER, CR, OR, UER, VR)
- **Case Management**: Nationwide
Progress with Malaria Control in Ghana – malaria parasite prevalence in children under five years

Malaria Parasite Prevalence Among Children 6-59 months in Ghana, 2011-2022

Malaria Prevalence
- <5
- 5 - 10
- >10 - 20
- >20 - 30
- >30 - 40
- >40

National Malaria Elimination Programme-Ghana
Progress with Malaria Control in Ghana – Malaria deaths per 100,000 population, Ghana

Proportion

Year

2018 2019 2020 2021 2022

Progress with Malaria Control in Ghana – Malaria deaths per 100,000 population, Ghana

Proportion

Year

2018 2019 2020 2021 2022

National Malaria Elimination Programme-Ghana
Parasite prevalence reduced from 50% in 2002 to 8.6% in 2022 (82.8% reduction)

In 2002, 50 out of 100 persons sampled in Ghana will have the plasmodium parasite while 9 per 100 sampled will carry the parasite in 2022

Malaria related deaths all ages, reduced from 6054 in 2000 to 151 by end of 2022 (97.5% reduction)

In 2000, we recorded 17 people dying from malaria every day while 1 person died from malaria every other day (2 days) in 2022

Under-five malaria case fatality rate reduced from 14.4% in 2000 to 0.03% in 2022 (99.8% reduction)

In 2000, we recorded 144 people dying from malaria out of 100,000 children under five malaria admissions while 3 person died out of every 100,000 in 2022
Summary Progress-2

Against NSP target of 50% reduction in malaria cases by 2025 using 2019 as baseline;

- Malaria related admissions (all ages), increased from 393,804 in 2019 to 423,417 in 2022 (8% increase)

In 2019, we recorded 1079 people are admitted for malaria every day while 1160 people are admitted for malaria every days in 2022

- Outpatient malaria cases decreased from 193 per 1000 population in 2019 to 155 per 1000 population in 2022 (20% reduction)

- Testing for malaria cases increased from 94% in 2019 to 98% in 2022 (4% increase)
Malaria Elimination Agenda
Ghana Malaria Elimination Agenda

• **Unanimous call** (by partners and stakeholders) for malaria elimination since 2022

• **Actions taken so far** towards malaria elimination
  
  • **Galvanizing political will;**
    ✓ Parliamentary Select Committee on Health/Malaria Caucus (orientation workshop, launch, commitment)
  
  • **Change of name** from control program to elimination program
  
  • **Malaria Elimination Audit**
  
  • **Mid-Term Review**
  
  • **Stakeholder Engagements-**
    comm. ownership
  
  • **Strategic Plan Development**
  
  • **Resource mobilization**
A National Malaria Elimination Strategic Plan (NMESP)* 2024-2028 has been developed to guide the elimination process

**Goals NMESP 2024-2028**

- Reduce malaria mortality by 90% by 2028 (using 2022 as baseline)
- Reduce malaria case incidence by 50% by 2028 (using 2022 as baseline)
- Eliminate malaria in 21 districts with very low malaria burden by 2028
Epidemiological Zones for Malaria Elimination

<table>
<thead>
<tr>
<th>Epi zone</th>
<th>Number of districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very low</td>
<td>21</td>
</tr>
<tr>
<td>Low</td>
<td>8</td>
</tr>
<tr>
<td>Moderate</td>
<td>83</td>
</tr>
<tr>
<td>High</td>
<td>149</td>
</tr>
<tr>
<td>Total</td>
<td>261</td>
</tr>
</tbody>
</table>

Strata
- Very low
- Low
- Moderate
- High
Interventions within the Elimination Strategic Plan 2024-2028 (1)

• All Districts (Zones)- Interventions to be continued
  • Quality **case management**
  • Intermittent Preventive Treatment of Malaria in Pregnancy (**IPTp**)  
  • Availability and rational use of quality **malaria commodities**
  • Distribution of Long-Lasting Insecticide-treated Nets (**LLINs**)  
  • Larval Source Management (**LSM**)  
  • Social Behavior Change (**SBC**)  
  • **Surveillance**
    • Entomological  
    • Epidemiological  
  • **Research**
    • Effective program **leadership and management** at all levels
Interventions within the Elimination Strategic Plan 2024-2028 (2)

• Very Low Burden Districts (Zone)
  • Mass Drug Administration (MDA) (New)
  • Single low dose Primaquine (SLDP) administration (New)
  • Enhanced Entomological Surveillance (New)
  • Enhance Epidemiological Surveillance (New)
    • Case-based reporting
    • Surveillance- Pharmacies and OTCMS
    • Reactive Case Detection
    • Active Case Detection and Response

• Moderate to High Burden Districts (Zones)
  • Indoor Residual Spraying (IRS) (Expansion)
  • Seasonal Malaria Chemoprevention (SMC) (Expansion)
  • Malaria Vaccination (Expansion)
  • Post-Discharge Malaria Chemoprevention (PDMC) (New)
  • Intermittent Preventive Treatment of malaria in school children (IPTsc) (New)
The Role of Malaria Case Management towards Elimination
Role of Malaria Case Management in Elimination

- Updated policies and guidelines (deployed physically and online)
- Enhance information dissemination
- Enhance adherence to guidelines and policies - private sector, community pharmacies and OTCMS
- New chemopreventive interventions
- Improved access to diagnosis and treatment
- Transmission blocking strategies - single low dose primaquine in very low burden areas
- Enhanced and deliberate multiple first-line therapy
Conclusion

• Significant progress made

• Elimination is feasible using the subnational elimination approach

• Country & community ownership, partnership and innovation is key to success

• Case management interventions are key to malaria elimination
Thank You